

20020612.ba v03_n350.bam.20020612

>From ???@??? Wed Jun 12 20:10:28 2002 -0500
Message-Id: <200206130110.g5D1A9t0024657@sco.theporch.com>
Date: Wed, 12 Jun 2002 20:09:38 CDT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 3350

BOATANCHORS Digest 3350

Topics covered in this issue include:

- 1) Re: Scariest commercial rig?
by "Arthur I. Larky" <ail0@lehigh.edu>
- 2) Info wanted on old TA-33 tribander
by "Herbert M. Rosenthal" <herbrose@lobo.net>
- 3) Re: Scariest commercial rig?
by Jack Harper <jharper@bsi2000.com>
- 4) Re: Info wanted on old TA-33 tribander
by "Al Parker" <anchor@ec.rr.com>
- 5) Re: Ed Marriner, W6BLZ (W6XM)
by john <johnmb@nc.rr.com>
- 6) [Fwd: SAQ Transmission 2002-06-30]
by Jerry Proc <jerry7proc@yahoo.com>
- 7) Re: Ed Marriner, W6BLZ (W6XM)
by David Hollander <n7rk@dancris.com>
- 8) Re: old homebrew rigs
by "David L. Thompson" <thompson@mindspring.com>
- 9) GR and Vibroplex Data Needed
by Merz Donald S <merz.ds@mellon.com>
- 10) RE: old homebrew rigs
by Merz Donald S <merz.ds@mellon.com>
- 11) Re: GR and Vibroplex Data Needed
by "Garey Barrell" <k4oah@mindspring.com>
- 12) Loudenboomer inquiry
by brian.k.harris@philips.com
- 13) Re: old homebrew rigs
by N5CM@aol.com
- 14) Re: old homebrew rigs
by Arden Allen <gumbear@pacbell.net>
- 15) vanishing inductance
by Arden Allen <gumbear@pacbell.net>
- 16) Re: vanishing inductance
by Scott Robinson <spr@earthlink.net>

Message-ID: <3D0669C1.CD9B8799@lehigh.edu>

Date: Tue, 11 Jun 2002 17:21:06 -0400
From: "Arthur I. Larky" <ail0@lehigh.edu>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Scariest commercial rig?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The scariest thing I have ever encountered was in my college physics class. We did the Miliken oil drop experiment. That's the one where you measure the charge on an electron by suspending a drop of oil in an electric field. You adjust the voltage until it hangs there, observing the oil drop through a microscope. A Metal microscope. A Metal microscope connected to B+. In a Metal cabinet. A Grounded Metal cabinet! Let your eye touch the microscope while you are leaning on the cabinet and you get stars in you eye! I did not get zapped because someone beat me to it and I'm a quick learner.

As a young ham in '48, I took the cover plate off of my ARC-5 transmitter and absently-mindedly laid my knuckles across the 1625 plate cap and the housing. I still have that scar - a combination of a DC burn and an RF burn. I try not do things like that any more!

Art K3HBA

Bill Coleman wrote:

> Nah, them volts are safely INSIDE the rig....
>
> The Gross transmitters from the 30's had HV on the front panel! Metering
> was done with a couple of milliameters with a phone plug pigtail sticking
> out the front panel. The meter pigtail was plugged into one of a series of
> shorting phone jacks that were mounted on insulated bushings. 1500V right
> on the front panel.
>
> I recall getting zapped my a National RX while hooking up a speaker, B+ on
> the innocuous looking rear terminal strip - no label of course.
> ~~~~~
> Bill Coleman N2BC
> <http://home.stny.rr.com/n2bc>
> ----- Original Message -----
> From: "Edward J Knobloch" <k4pf@juno.com>
> To: "Old Tube Radios" <boatanchors@theporch.com>
> Sent: Tuesday, June 11, 2002 12:39 AM
> Subject: Scariest commercial rig?
>
> > > Arden Allen had some good tips when working around the HV
> > > of a transmitter.
> > > He said it was "SCARY" to hook a voltmeter to the secondary
> >

> > This got me thinking - which is the SCARIEST commercial rig
> > I've run into? Hands down: the WRL Galaxy V SSB transceiver.
> > Flip open the hinged lid on the top, and there the finals are,
> > uncaged, with about a sixteenth inch gap between the tube caps
> > and the hinged cover. 800VDC, anyone?
> > The hinged cover doesn't even have a screw to hold it down -
> > Gravity was good enough. No HV relay either, the 800V is there
> > whenever the rig is turned on.
> >
> > Even the exciter stage is pretty "exciting", with 350VDC on some of
> > the variable capacitor sections, above the chassis, within
> > easy reach. They didn't even bother with warning stickers.
> >
> > Brrr,
> > Ed Knobloch k4pf@juno.com
> >
> >

Message-ID: <3D067BA5.39776AC2@lobo.net>
Date: Tue, 11 Jun 2002 16:37:55 -0600
From: "Herbert M. Rosenthal" <herbrose@lobo.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Info wanted on old TA-33 tribander
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Wonder whether any reader might have the resonant frequencies of the 6 pairs of traps used on a TA-33?

This measurement is made with a GDO loosely coupled to the trap section only, away from the elements; the resonant frequencies are usually far from the band for that trap. I have done this on an A-3 with frequencies I obtained from Cushcraft, years ago, to locate bad traps, caused by oxidized connections within the traps (they will use self-tappers to save a dime, won't they!). Wire brush and some ALOX on the connections has held me for 10+ years with that A-3.

Our club had an antenna day Saturday in preparation for Field Day... assembled the beams, elevated them, checked them for resonance, then disassembled them and stored them for the big event. WE would like to use the TA-33 which came to us in a bundle, long out of service, and it is possible that elements and traps did get mixed up... or that there is/are bad trap(s).

Any help to me directly, please:

Thanks,

Herb Rosenthal W5AN
herbrose@lobo.net

Albuquerque

Message-Id: <4.1.20020611173217.0364ff20@mail.bsi2000.com>
Date: Tue, 11 Jun 2002 17:34:25 -0600
To: Old Tube Radios <boatanchors@theporch.com>
From: Jack Harper <jharper@bsi2000.com>
Subject: Re: Scariest commercial rig?
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 08:32 6/11/2002 -0400, Bill Colema N2BC wrote:

>Nah, them volts are safely INSIDE the rig....

>

<snip>

>I recall getting zapped my a National RX while hooking up a speaker, B+ on
>the innocuous looking rear terminal strip - no label of course.

Yep -- my National NC-125 receiver did just that to my pinky also -- 'twas a BIG
surprise...

Regards to the List from a firey and very smoky Colorado...

Jack, W0YJ (Friend to all things Hammarlund)

Jack Harper
303.231.9095

BSI2000, Inc.
Lakewood, Colorado USA

<http://www.bsi2000.com> (Last Update: 020430)

Message-ID: <06ce01c211ae\$7ddcf6d0\$6501a8c0@w8ut>
From: "Al Parker" <anchor@ec.rr.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Info wanted on old TA-33 tribander
Date: Tue, 11 Jun 2002 21:12:17 -0400
MIME-Version: 1.0
Content-Type: text/plain;

charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Herb,

I'd be interested in the info if you get it, just for future reference, as I've got a TA-33, in use for over 20 yrs at several QTH's. I think they're one of the best made antennas ever.

I'd suggest slipping the outer sleeve off of each trap for inspection & cleaning out the spiders. I did that some time back, was surprized at the stuff in there that wasn't supposed to be, but electrically things were FB.

I think I've got the orig. assy manual & can scan & email copy for you if you'd like.

73,

Al, W8UT

New Bern, NC

BoatAnchors appreciated here

<http://www.thecompendium.net/radio/>

<http://www.hammarlund.info>

----- Original Message -----

From: "Herbert M. Rosenthal" <herbrose@lobo.net>

To: "Old Tube Radios" <boatanchors@theporch.com>

Sent: Tuesday, June 11, 2002 6:37 PM

Subject: Info wanted on old TA-33 tribander

> Wonder whether any reader might have the resonant frequencies of the 6
pairs of

> traps used on a TA-33?

>

Message-Id: <3.0.3.32.20020611173004.01e39d88@pop-server.nc.rr.com>

Date: Tue, 11 Jun 2002 17:30:04 -0400

To: Old Tube Radios <boatanchors@theporch.com>

From: john <johnmb@nc.rr.com>

Subject: Re: Ed Marriner, W6BLZ (W6XM)

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Hi Lynn

This is a good topic... I've got a picture here on my desk ready to scan and send to WA3VJB who's creating an archive, but it shows K6HQI , Les, in front of his big HB rig, that held forth on 14.286 evenings for decades.

Wonder where his rig went... does anyone know? It would be so sad for

such "famous" HB gear got neglected and abused. Im sure that over the years this happened (s) a _lot_, and it's a shame....especially with HB gear....

While we're on the subject, I bought a transmitter allegedly built by Lew McCoy (it's an 815 modulated by another 815....love those spacecraft looking tubes!). Did anyone know Lew well enough to know whether this is true or not? Pictures on request.

73
John

At 12:42 PM 6/11/02 -0500, Lynn Fisk wrote:

>Greetings to the group. It is only necessary to read through a few of the
>CQ and 73 magazines of the 1950s and 1960s to see that Ed Marriner, W6BLZ,
>(now W6XM), was one of the great writers and builders of those times. He
>published articles on the construction of simple exciters, receivers and
>shack accessories in most every issue. I recently built a crystal checker
>that he designed.

>

>I have learned that Ed is still alive and well in a retirement facility in
>California, and we have corresponded. I am a friend of his son, Harry. I
>inquired of Ed, if any of the rigs he designed and built are known to
>survive today. He mailed me a little antenna tuner that he had built, but
>indicated that he had given all the rest of his stuff to a club in
California.

>

>My question to the group is: Does anyone have, or know of, the existence
>of any of Ed's old projects, either built by him, or based on his designs?
>I would like to see these preserved.

>

>73, K5LYN.

>

>

Message-ID: <20020612031742.77737.qmail@web21501.mail.yahoo.com>

Date: Tue, 11 Jun 2002 20:17:42 -0700 (PDT)

From: Jerry Proc <jerry7proc@yahoo.com>

Subject: [Fwd: SAQ Transmission 2002-06-30]

To: Old Tube Radios <boatanchors@theporch.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

From: "Lars_KÅlland" <sm6nm@telia.com>

"ALL STATIONS, THIS IS GRIMETON RADIO, SIERRA ALPHA
QUEBEC"

The annual transmission from Grimeton Radio/SAQ in
Sweden with the
Alexander alternator on 17,2 kHz will take place on
Sunday the 30th of June
at 08:30 UTC and will be repeated at 08:45 UTC, 12:30
UTC and 12:45
UTC.

The station building is open to public during
transmission.

QSL-reports are kindly received:

- via e-mail info@alexander.n.se or
- via fax +46-340-674195 or
- via ham call "SM6NM" via Swedish Amateur Bureau
(SSA) or direct via CBA or
- via mail to Alexander - Grimeton Veteranradios
Vaenner,
Radiostationen, Grimeton 72, SE-430 16 ROLFSTORP,
SWEDEN or
- via amateur radio QSO with the call "SA6Q" on the
following
frequencies:

09:00-12:00 UTC 136,8 kHz CW

07:00-08:00 UTC	14035 kHz CW	14215 kHz SSB
08:00-08:15 UTC	7015 kHz CW	7050 kHz SSB
09:00-10:00 UTC	14035 kHz CW	14215 kHz SSB
10:00-11:00 UTC	7015 kHz CW	7050 kHz SSB
11:00-12:00 UTC	14035 kHz CW	14215 kHz SSB
12:00-12:15 UTC	7015 kHz CW	7050 kHz SSB
13:00-14:00 UTC	14035 kHz CW	14215 kHz SSB

Also read web www.alexander.n.se

Note: QSL-cards to "SAQ" are not possible via Swedish
Amateur Bureau

(SSA) because SAQ is a commercial call sign and not a member of SSA.

When giving QSL to "SAQ" also please add your snail-mail address, because, of the same reason, we can not send QSL-cards via bureau, but only direct via mail.

QSL-cards to "SA6Q" are OK via bureau.

Regards

SM6NM/Lars

=====

--

Regards,
Jerry Proc
E-mail: jerry7proc@yahoo.com

Do You Yahoo!?
Yahoo! - Official partner of 2002 FIFA World Cup
<http://fifaworldcup.yahoo.com>

Message-ID: <3D0754BD.84BFDD35@dancris.com>
Date: Wed, 12 Jun 2002 07:03:41 -0700
From: David Hollander <n7rk@dancris.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Ed Marriner, W6BLZ (W6XM)
Content-Type: text/plain; charset=us-ascii; x-mac-type="54455854"; x-mac-creator="4D4F5353"
Content-Transfer-Encoding: 7bit

Ed Marriner was a friend of my Elmer W6BAM both being licensed around the same time. W6BAM became an SK last year at 97 years old. I have had a picture of one of W6BLZ's stations on my web pages for a number of years. Although there is no date on the picture, it looks like early 1930's or late 1920's.

Here is a link to see that photo.

<http://members.dancris.com/~n7rk/w6bam.html>

Enjoy,

Dave

--

Dave N7RK <http://members.dancris.com/~n7rk>
Phoenix, Arizona *DXCC Honor Roll* *WAZ#23 - 75 Meter SSB*

ex-XE2/N7RK, N7RK/ZB2, VK2ERK, ZM0AJN, WB6NRK, WN6IWX

Boatanchor Collector Extraordinaire preferring Hallicrafters, National
and what ever else looks interesting!

Message-ID: <000301c2123d\$af73c4a0\$cc6256d1@default>

From: "David L. Thompson" <thompson@mindspring.com>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: old homebrew rigs

Date: Wed, 12 Jun 2002 14:17:27 -0400

I also wonder where the old homebrew gear went. One guy I know built an improved copy of the KW-1 and W2ENM in New Jersey had a rig in a six foot rack that sqawked when he modulated. Even my old rig in a homebrew 6 foot rack (see ER April 1997 Front Cover). On getting married in 1973 I traded the whole rig including exciter and modulator/drive to Arnold WA4MIV. He sold it to someone in NW Georgia.

Unfortunately I suspect much of this old gear was destroyed for parts or sits unused in a garage or attic or wet basement somewhere.

If you find a 300 to 1KW AM.CW rig and it needs TLC let me know.

73 Dave K4JRB

Message-ID: <20020612183312.14238.qmail@mellon.com>

From: Merz Donald S <merz.ds@mellon.com>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: GR and Vibroplex Data Needed

Date: Wed, 12 Jun 2002 14:22:06 -0400

MIME-Version: 1.0

Content-Type: multipart/alternative;

boundary="----=_NextPart_001_01C2123E.0F0B8240"

This message is in MIME format. Since your mail reader does not understand this format, some or all of this message may not be legible.

-----=_NextPart_001_01C2123E.0F0B8240
Content-Type: text/plain;
charset="iso-8859-1"

I need any info on the following:

General Radio Inductance Bridge Type 667-A. Huge piece of GR test gear. Need manual copy or any relevant information to decide whether or not to keep this thing.

Vibroplex bug. Japanned black base with gold pin striping. Black metal tag showing s/n 71783 with 253 Broadway address. Nickel-plated parts. I'd like to get an approximate date on this bug.

Any help appreciated.

Thanks.

73, Don Merz, N3RHT

DISCLAIMER: The information contained in this e-mail may be confidential and is intended solely for the use of the named addressee. Access, copying or re-use of the e-mail or any information contained therein by any other person is not authorized. If you are not the intended recipient please notify us immediately by returning the e-mail to the originator.

-----=_NextPart_001_01C2123E.0F0B8240
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

* * * * *
* ---REMAINDER OF MESSAGE TRUNCATED--- *
* This post contains a forbidden message format *
* (such as an attached file, a v-card, HTML formatting) *
* Mail Lists at theporch.com only accept PLAIN TEXT *
* If your postings display this message your mail program *
* is not set to send PLAIN TEXT ONLY and needs adjusting *
* * * * *

-----=_NextPart_001_01C2123E.0F0B8240--

Message-ID: <20020612184338.20158.qmail@mellon.com>
From: Merz Donald S <merz.ds@mellon.com>

To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: old homebrew rigs
Date: Wed, 12 Jun 2002 14:36:13 -0400
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="-----=_NextPart_001_01C21240.0796B780"

This message is in MIME format. Since your mail reader does not understand this format, some or all of this message may not be legible.

-----=_NextPart_001_01C21240.0796B780
Content-Type: text/plain;
charset="iso-8859-1"

I was going through some old issues of RTTY last night and almost every photograph had at least one rack of homebrew in it. Could it all really have been thrown away? I guess it is possible, when you look at the millions of 3-dialer BC radios that were made in the 20's and the number that survive today.

73, Don Merz, N3RHT

-----Original Message-----

From: David L. Thompson [mailto:thompson@mindspring.com]
Sent: Wednesday, June 12, 2002 2:17 PM
To: Old Tube Radios
Subject: Re: old homebrew rigs

I also wonder where the old homebrew gear went. One guy I know built an improved copy of the KW-1 and W2ENM in New Jersey had a rig in a six foot rack that sqawked when he modulated. Even my old rig in a homebrew 6 foot rack (see ER April 1997 Front Cover). On getting married in 1973 I traded the whole rig including exciter and modulator/drive to Arnold WA4MIV. He sold it to someone in NW Georgia.

Unfortunately I suspect much of this old gear was destroyed for parts or sits unused in a garage or attic or wet basement somewhere.

If you find a 300 to 1KW AM.CW rig and it needs TLC let me know.

73 Dave K4JRB

DISCLAIMER: The information contained in this e-mail may be confidential and is intended solely for the use of the named addressee. Access, copying

or re-use of the e-mail or any information contained therein by any other person is not authorized. If you are not the intended recipient please notify us immediately by returning the e-mail to the originator.

-----_=_NextPart_001_01C21240.0796B780
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

```
* * * * *
*      ---REMAINDER OF MESSAGE TRUNCATED---      *
*      This post contains a forbidden message format      *
*      (such as an attached file, a v-card, HTML formatting) *
*      Mail Lists at theporch.com only accept PLAIN TEXT      *
*      If your postings display this message your mail program *
*      is not set to send PLAIN TEXT ONLY and needs adjusting *
* * * * *
```

-----_=_NextPart_001_01C21240.0796B780--

Message-ID: <004201c21244\$de28ff20\$6501a8c0@hp>
From: "Garey Barrell" <k4oah@mindspring.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: GR and Vibroplex Data Needed
Date: Wed, 12 Jun 2002 15:10:51 -0400
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Don -

Approximately 1919.

See:

<http://www.la.ca.us/frandy/dating.html>

73, Garey - K40AH
Atlanta

----- Original Message -----
From: "Merz Donald S" <merz.ds@mellon.com>
To: "Old Tube Radios" <boatanchors@theporch.com>
Sent: Wednesday, June 12, 2002 2:22 PM
Subject: GR and Vibroplex Data Needed

> I need any info on the following:
>
> General Radio Inductance Bridge Type 667-A. Huge piece of GR test gear. Need
> manual copy or any relevant information to decide whether or not to keep
> this thing.
>
> Vibroplex bug. Japanned black base with gold pin striping. Black metal tag
> showing s/n 71783 with 253 Broadway address. Nickel-plated parts. I'd like
> to get
> an approximate date on this bug.
>
> Any help appreciated.
> Thanks.
> 73, Don Merz, N3RHT
> *****
> DISCLAIMER: The information contained in this e-mail may be confidential
> and is intended solely for the use of the named addressee. Access, copying
> or re-use of the e-mail or any information contained therein by any other
> person is not authorized. If you are not the intended recipient please
> notify us immediately by returning the e-mail to the originator.
>

From: brian.k.harris@philips.com
Subject: Loudenboomer inquiry
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <0F2AA517D5.E0F7EE3D-0N88256BD6.00720757@diamond.philips.com>
Date: Wed, 12 Jun 2002 16:14:06 -0500
MIME-Version: 1.0
Content-type: text/plain; charset=us-ascii

I'm doing some research concerning Radio Industries' Loudenboomer Mark II amplifier and I need your help. I am trying to determine about how many were built of the different variations. I'm not interested in the HT-45 that the Loudenboomer became.

The unit photographed for the front cover of my original pre-Hallicrafters Radio Industries manual has a cover that has a circular area with perforated holes for ventilation. This covers wraps over the sides about an inch from the top. It attaches with

screws or Dzus fasteners on the side. Let's call this Version 1.

The cover on the unit I have (Serial #311) does not wrap over the sides. Rather, the cabinet wraps over the top, somewhat like S-line cabinets do. The top is held in place with four Dzus fasteners. The front panel has a white rectangular label with a large lower case 'r' and a smaller lower case 'i'. The dot over the 'i' is part of the 'r'. Let's call this Version 2.

The unit photographed for the manual after Hallicrafters acquired RI, has the same cabinet but the front panel logo is different. It has a partial circle in white that surrounds an upper case 'R' and there is the typical Hallicrafters lower case 'h' at about 4 o'clock in the circle. Let's call this Version 3.

I would appreciate knowing which version you have, its serial number and if you have the original power supply (they were optional). If you have any other information concerning this amplifier or Radio Industries in general please share it.

Thank you and very 73,

Brian K. Harris, Senior Field Application Engineer, WA5UEK

Philips Semiconductors
2140 Lake Park Blvd. Suite 200
Richardson, Texas 75080 USA
Direct 972-705-2484
Fax 972-480-9617
Cell 214-763-5977

EMAIL brian.k.harris@philips.com

From: N5CM@aol.com
Message-ID: <11b.11f8a66e.2a391d36@aol.com>
Date: Wed, 12 Jun 2002 17:55:02 EDT
Subject: Re: old homebrew rigs
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="part1_11b.11f8a66e.2a391d36_boundary"

--part1_11b.11f8a66e.2a391d36_boundary
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Hi Dave & Gang,

Speaking of homebrew rigs, have any of you heard of an oscillator circuit called a,

"Pull-Pull" oscillator????

Back in the spring of 1938 when I got my first ham ticket, W5HHA, I ran across the circuit in a publication and built it up....I cannot remember the publication and thought it was QST but haven't been able to locate it....

It resembled the "Tuned Grid Tuned Plate Oscillator", the difference being that the feedback coil wound over the plate coil was wound backwards.

He theorized that a change in plate current with varying load (Keying CW) caused a change in the field which induced a change in the feedback winding but in reverse polarity causing the two pulling in opposite directions to lock together holding the frequency steady (Pull-Pull)....

I can vouch that it was as stable as any crystal controlled xmtr....I never got less than a T9x report on 20 CW....

I would like to build up the little one tube xmtr again - if anyone has a type 47 tube, I would like to buy it....That was the only tube I had that was rated with reasonable output - was an audio output in some of the early "electric sets"....

Ken....N5CM....NNN0FKQ....

--part1_11b.11f8a66e.2a391d36_boundary

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

```
* * * * *
*      ---REMAINDER OF MESSAGE TRUNCATED---      *
*      This post contains a forbidden message format      *
*      (such as an attached file, a v-card, HTML formatting) *
*      Mail Lists at theporch.com only accept PLAIN TEXT      *
*      If your postings display this message your mail program *
*      is not set to send PLAIN TEXT ONLY and needs adjusting *
* * * * *
```

--part1_11b.11f8a66e.2a391d36_boundary--

Date: Wed, 12 Jun 2002 16:42:05 -0700

From: Arden Allen <gumbear@pacbell.net>

Subject: Re: old homebrew rigs

To: Old Tube Radios <boatanchors@theporch.com>

Message-id: <0GXM00AAZBX10E@mta6.snfc21.pbi.net>

MIME-version: 1.0

Content-type: text/plain; charset=ISO-8859-1

Content-transfer-encoding: 7bit

Hi Ken;

> Speaking of homebrew rigs, have any of you heard of an oscillator circuit
> called a,
> "Pull-Pull" oscillator????

This sounds like the type of circuit that does not reveal its true nature by drawing a schematic diagram from the way its parts are hooked up. Oscillators can be very confusing. The schematic of a tuned-grid, tuned-plate oscillator is not intuitive because of the undisclosed grid-plate feedback capacitance and the requirement to obtain the correct phase shift for oscillation by tuning the plate or grid tank off resonance. You can't defeat the laws of physics. An oscillator must have in-phase feedback and a gain of 1+. Now draw the real schematic of a "pull-pull" oscillator and see what it looks like!

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Date: Wed, 12 Jun 2002 17:26:34 -0700
From: Arden Allen <gumbear@pacbell.net>
Subject: vanishing inductance
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <0GXM00AB2BX20E@mta6.snfc21.pbi.net>
MIME-version: 1.0
Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 7bit

The latest bench project here was a Heathkit BR-2 AM broadcast receiver. This kit, sold prior to 1955, sports the usual AA5 design, 5Y3GT, 12BE6, 12BA6, 12AV6 and 12A6. Heath, bought up a large supply of surplus 12A6's and used them in their basic receiver kits until they ran out and switched to the 12V6GT. They used a ferrite loopstick antenna in this receiver which was not as good for station pulling as an open wire loop antenna. Unexplainably, Heath used a power transformer that supplied 350 volts to the plate of the 12A6, no doubt the reason that the original 12A6 was as flat as a call for mercy for terrorists.

The kit was obviously built by a novice, and a frugal one at that. Instead of using the hook-up wire supplied with the kit, he used the trimmings from the power transformer leads throughout until he ran out and finished the last 3rd of the wiring with the supplied wire. And, of course, the usual huge solder blob connections abounded. There were ample signs of connections having been reworked. The radio was DOA.

The three section filter cap had spewed some of its intestinal fluids out

onto the chassis some time way back, but with a careful bring-up of the power supply it proved to be still functional in all sections. No local oscillations. Converter tube good. Eyeball examination revealed a bit of the oscillator coil winding flying off into space. It must have been snagged by a previous interventionist's blunder. Fortunately, easy to fix.

Now the receiver was hear stations, but hardly. Tube swapping, voltage checks, resistance checks, and finally an attempt at alignment. All seemed right until I got to the output tank of the second IF transformer. There was no peak, maximum sensitivity was achieved by screwing the core all the way in but it was still nearly stone deaf. A resistance check of the windings showed no problem.

Out came the can, it's gotta be the internal capacitor. Been there, done that. The open assembly mica caps looked clean and free of corrosion. Hm. I disconnected one end of the coil and checked the capacitor on my recently acquire Tektronix 130 L-C meter (I wanted one for so long). Dead nuts on 100 pF. Musta fixed it by accident, I said, disgustedly, to myself. I put the can back in the receiver and voila, oh shit, still same problem. Out came the can. A few more strands of gray hair on the floor. Time for high level engineering. My calculator told me I need to 1.2 mH to resonate at 455 KHz with 100 pF. Finally, I can get some use out of my GR 1650B impedance bridge. So much fun twisting and turning those dials. The coil only registered .9 mH with the core adjusted for maximum inductance. Bad core? Eyeball says core is perfect. Another hmmm (getting longer now). Ohmmeter says the winding is good! Naaahh, can't be, *&^%\$!

A foray into the garage produced a replacement (thank God for organ donors). Radio now hears bunches of stations although not as great as some AA5's. I blame that on the ferrite loopstick. Not as big an "aperture", I guess.

My conclusion is the transformer winding developed a one or few turn short, not enough to show up on an ohmmeter. Fini, the story of vanishing inductance.

Message-Id: <5.1.0.14.0.20020612180835.00aef3c8@mail.earthlink.net>
Date: Wed, 12 Jun 2002 18:12:09 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: Scott Robinson <spr@earthlink.net>
Subject: Re: vanishing inductance
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 05:26 PM 6/12/2002 -0700, you wrote:

>The latest bench project here was a Heathkit BR-2 AM broadcast receiver.

>

>
>Out came the IF can, it's gotta be the internal capacitor. Been there, done
>that. The open assembly mica caps looked clean and free of corrosion.
>Hmmm. I disconnected one end of the coil and checked the capacitor on my
>recently acquire Tektronix 130 L-C meter (I wanted one for so long). Dead
>nuts on 100 pF. Musta fixed it by accident, I said, disgustedly, to
>myself. I put the can back in the receiver and voila, oh shit, still same
>problem. Out came the can. A few more strands of gray hair on the floor.
>Time for high level engineering. My calculator told me I need to 1.2 mH to
>resonate at 455 KHz with 100 pF. Finally, I can get some use out of my GR
>1650B impedance bridge. So much fun twisting and turning those dials. The
>coil only registered .9 mH with the core adjusted for maximum inductance.
>Bad core? Eyeball says core is perfect. Another hmmmmmmmmmm (getting
>longer now). Ohmmeter says the winding is good! Naaahh, can't be, *&^%\$!
>
>A foray into the garage produced a replacement (thank God for organ
>donors). Radio now hears bunches of stations although not as great as some
>AA5's. .I blame that on the ferrite loopstick. Not as big an "aperture",
>I guess.
>
>My conclusion is the transformer winding developed a one or few turn short,
>not enough to show up on an ohmmeter. Fini, the story of vanishing
>inductance.

and Scott comments:

Not so fast! Another possible cause of reduced L is changes in the ferrite-either cracks (bad for the Q as well) or swelling due to moisture absorption by the binding adhesive.

Of course, I'm chasing mysterious loss of Q in my Halli SX-42 2nd AM if transformer. It tunes OK but gives symptoms of low Q. I suspect the ferrite slug, but so far my pleas have not yielded a replacement.

Yours for inductive reasoning,

/scott

End of BOATANCHORS Digest 3350
